

# Integrating Clinical Pharmacists in Primary Care and Population Health Teams

Connecticut State Innovation Model (SIM) Community and Clinical Integration  
Technical Assistance (TA) Program

**CT OHS SIM Steering Committee | February 13<sup>th</sup>, 2020**



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## Introductions



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## Agenda

### Technical Assistance (TA) Program Overview

Goals of TA Program & Participating Entities  
 Definitions of Pharmacist Practice Models  
 TA Approach

### Featured PE Projects

NEMG- Direct Patient Care Pharmacist Model  
 CHC- Population Health Team Pharmacist Model

### Key Messages & Recommendations

### Discussion/Q&A

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## Background: Medication-Related Problems in Primary Care



65% of U.S adults take  $\geq 1$  medication; 22% take  $\geq 5$  medications



20% of people discharged from hospital to home experienced an **adverse event within 3 weeks**; 35% were preventable and medication related



Preventable medication errors result in **7,000** deaths in the U.S. each year



Outpatient preventable **medication adverse events** cost **~\$3 billion** annually in the U.S.



90% of **healthcare spending\*** is for treating people with **chronic conditions**

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## Goals of the TA Program

Guiding Principle: *"Meet PEs Where They Are"*

The program was available to all CCIP Participating Entities (PEs) as a no-cost opportunity to enhance capabilities for achieving:

- CCIP Core Standard 1: **Comprehensive Care Management**
- CCIP Elective Standard 3: **Comprehensive Medication Management**

### Goal:

- Work with PEs who have a pharmacist or will be hiring a pharmacist
- Tailor PE-specific implementation plans to integrate and sustain pharmacist(s) in primary care teams and/or population health programs

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## Participating Entities (PEs)







**4 of the 9 eligible PEs** committed to the TA program and had a full-time pharmacist

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## Pharmacist Practice Models

PEs	Pharmacist Services Models	
	Direct Patient Care	Population Health
		✓
	✓	
		✓
	✓	

### DIRECT PATIENT CARE MODEL

#### Use of Collaborative Practice Agreement (MDs and APRNs)

- Pharmacist meets one-on-one with patients
- Pharmacist provide comprehensive medication management
- Pharmacist implements medication changes and orders lab tests
- Pharmacist see patients until therapy goals are met

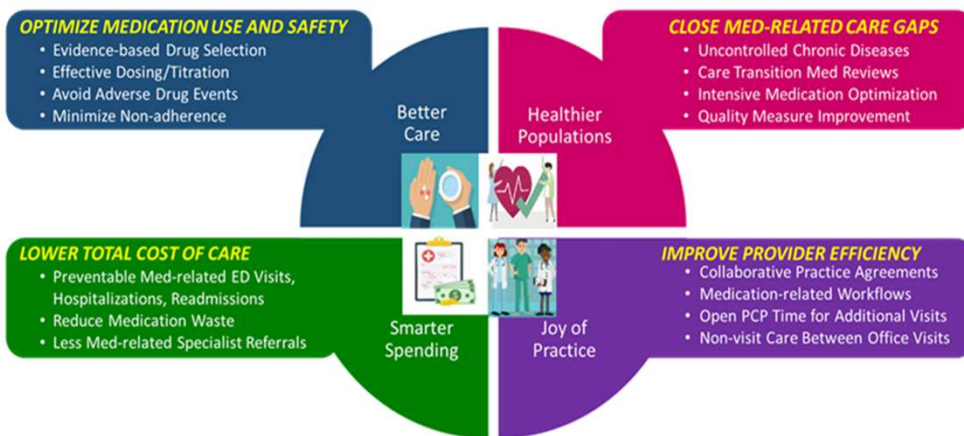
### POPULATION HEALTH TEAM MODEL

- Pharmacist does NOT meet with patients
- Pharmacist reviews and assesses medication regimens
- Pharmacist sends targeted medication optimization recommendations (i.e. hypertension, diabetes) to PCPs for implementation

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## TA Plans Aligned with Quadruple Aim



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## TA Methods


<b>Total UConn TA Hours</b>  <b>1,871.90</b>	<b>Core Team TA Hours</b>  <b>1,747.65</b>	<b>PE Team TA Hours</b>  <b>124.25</b>	<b># WebEx Meetings</b>  <b>58</b>	<b># In-person PE Team</b>  <b>30</b>	<b># Coaching Sessions</b>  <b>11</b>
<b>On-site Workflow Mapping</b>  <b>7</b>	<b>Subject Matter Experts</b>  <b>3 Webinars</b>	<b>Organizational Factors</b>  <b>6</b>	<b>Pharmacist Factors</b>  <b>4</b>	<b>Project Dashboards</b>  <b>Weekly</b>	<b>On-line Learning Community</b>  <b>8 Users / 538 Hits</b>

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## Post-TA PE Participant Survey

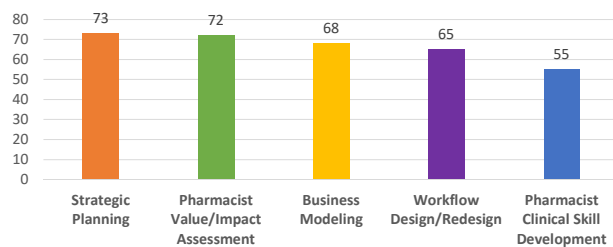
### Overall PE Rating of Usefulness of TA Methods

 <b>89%</b>	 <b>88%</b>	 <b>82%</b>	 <b>75%</b>	 <b>74%</b>
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### Overall PE Satisfaction with TA Services= 91%



### PE Core Team Rating of Goal Advancement



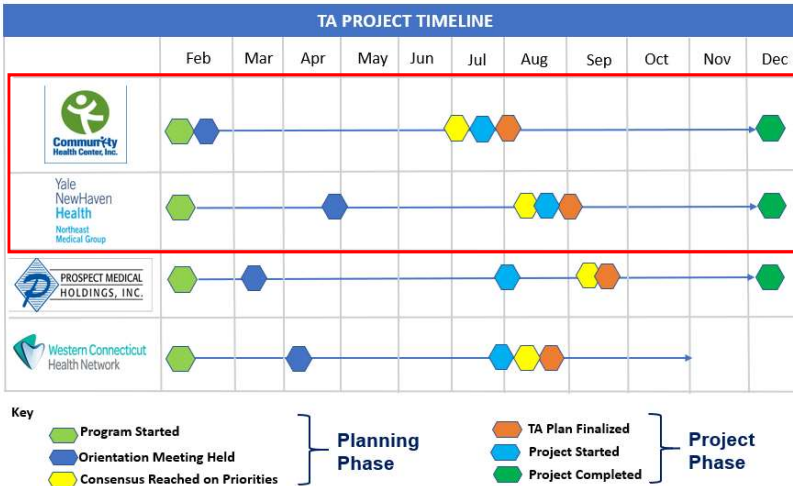
### Lessons Learned

Lessons Learned	% of Total Respondents
Importance of <b>qualified and experienced pharmacist</b> in primary care settings/population health roles	<b>79%</b>
How to use <b>capacity modeling</b> for pharmacist services	<b>71%</b>
How to <b>measure value/impact</b> of pharmacist services	<b>71%</b>
The <b>variety of pharmacist practice models</b> for direct patient care and population health	<b>71%</b>
The <b>comprehensive medication management</b> process to optimize regimens	<b>50%</b>
More <b>effective/efficient workflows</b> with pharmacist integration	<b>50%</b>
Importance of <b>readily available data</b> to identify patients for pharmacist interventions	<b>43%</b>

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## TA Program Timeline



- On average, **8 months** of the TA Program timeline was required for planning activities

- **3 months** for implementation of projects

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## Featured PE: Northeast Medical Group (NEMG)

### Direct Patient Care Model



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- Pharmacist in **3 NEMG Practices (~3 years)**
  - New Haven, North Haven, and Trumbull
- **Highly credentialed and skilled** pharmacist
  - Residency training in primary care
  - 4 years of ambulatory care work experience within a large integrated health system in Oregon
  - Board certified pharmacotherapy and ambulatory care specialist
- **6 Collaborative Practice Agreements** with MDs/APRNs
- PCP **referrals for high-risk**, complex patients
- Pharmacist sees patients **between PCPs visits**
- Pharmacist Impact on PCPs
  - **Reduced clinical workload burden** and improve provider satisfaction
  - **Improved patient outcomes** and satisfaction
- NEMG leaders **pursuing pharmacist scalability**

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## Featured PE: NEMG TA Approach

<b>PE Team TA Hours</b>  <b>45</b>	<b># In-person PE Team</b>  <b>4</b>	<b># WebEx Meetings</b>  <b>16</b>	<b>Learning Community</b>  <b>3 users/155 hits</b>
<b># Coaching Sessions</b>  <b>0</b>	<b># Workflow Mapping</b>  <b>5</b>	<b>Project Dashboards</b>  <b>Weekly</b>	<b>Subject Matter Experts</b>  <b>3 Webinars</b>

- **Project 1: Analysis of Clinical Pharmacist Impact on A1c Levels**
- **Project 2: Scaling Clinical Pharmacist Services**
- **Project 3: Pharmacy Services for Medication Refill and Prior Authorization**

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## NEMG Project 1: First Analysis of Pharmacist Impact on A1c Levels

- **Pharmacist Visits:**
  - Meet with patients between PCP visits
  - Intensive medication optimization and management
    - Average of 4 patient visits in 5 months
- **Patient Demographics (N=73):**
  - Average age: 59 years old
  - Gender: 56% male
- **Findings:**
  - Average A1c reduction of 1.3%
  - **Patients that started with an A1c ≥11% had an average reduction of 3.0%**
  - Positive relationship identified between A1c improvement and number of pharmacist visits
  - **67% of patient's achieved A1c goal of <9%**
  - Positive physician feedback
- **NEMG Next Steps:** Scale pharmacist FTEs for direct patient care services

NEMG Pharmacist's Diabetes Patients (N=73)					
A1c Ranges	Average A1c (%)			Average #	
	Before	After	Change	Pharmacist Visits	Months
≥11%	12.4	9.4	-3.0	4	5
10%-11%	10.3	9.4	-0.9	3	4
9%-10%	9.4	8.8	-0.6	5	6
8%-9%	8.5	7.7	-0.8	3	5
<8%	7.4	7.1	-0.3	4	5
<b>Total</b>	<b>9.9</b>	<b>8.6</b>	<b>-1.3</b>	<b>4</b>	<b>5</b>

“...every patient that has come into contact with Amanda [NEMG's clinical pharmacist] has benefited from it...” – PCP, NEMG New Haven

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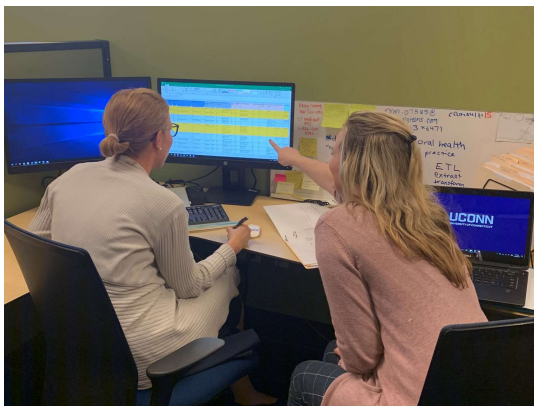






## CHC, Inc. Pilot Project (3 Months)

### Medication Optimization: Uncontrolled HTN + T2DM



**N=41 high-risk, uncontrolled patients with BOTH high blood pressure and type 2 diabetes**

#### Patient Criteria:

- Systolic BP between 140-150 mm Hg AND
- A1c between 9%-10%
- Regardless of upcoming patient appointments and practice location

#### Approach:

- Centralized pharmacist with no direct patient interaction
- **Pharmacist reviewed and assessed** high blood pressure and diabetes medications
- **Pharmacist sent PCP's recommendations** for medication optimization via electronic message

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## Featured PE: CHC, Inc.

### Medication Optimization Pilot

Type of Recommendation (N=47)	# of Pharmacist Recommendations (% of Total)			
	Pharmacist Recs Sent to PCP	Recs Implemented by PCP	Recs Pending Patient Visit	Recs NOT Documented by PCP
<b>T2DM Total</b>	17 (36%)	13 (76%)	4 (24%)	0 (0%)
<b>HTN Total</b>	11 (23%)	8 (73%)	1 (9%)	2 (18%)
<b>Care Coordination for Medication Optimization Total</b>	19 (40%)	10 (53%)	9 (47%)	0 (0%)
<b>Total</b>	<b>47</b>	<b>31 (66%)</b>	<b>14 (30%)</b>	<b>2 (4%)</b>

\* Additional results are pending upcoming patient appointments

#### Key Messages:

- **59% of pharmacist recommendations on medication optimization**
- **40% of pharmacist recommendations on care coordination** to reengage patients in appointments and/or necessary labs prior to making medication changes

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## Featured PE: CHC, Inc.

### A1c and BP Patient Outcomes Before & After Implementation of Pharmacist Recommendations (3-Month Results)

A follow-up chart review was performed to determine A1c and BP changes for those patients where PCPs implemented

#### T2DM (8 Patients):

- The average A1c decreased from 9.5% to 8.6%
- The average A1c improvement was **0.9%**

#### HTN (6 patients):

- The average BP decreased from 146/84 mm Hg to 132/74 mm Hg
- The average systolic and diastolic blood pressure improvement was **14 mm Hg and 10 mm Hg**, respectively

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## Featured PE: CHC, Inc.

### Next Steps (PE Participant Survey)



All projects will be **reviewed at upcoming management meetings** and for use in **strategic business plans**.



CHC plans to **expand projects to other high-impact populations** and to **improve other care gap measures/outcomes**.



CHC will use the capacity plan to **pilot new projects** and to **standardize and optimize practices**.

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## Overall TA Program Insights



### Pharmacist Success Factors

*Leading factors in the success of TA projects*

- **Well-defined** pharmacist role
- Pharmacist **training, work experience, and credentials**
- Pharmacist skills in building **trusted relationships with patients and clinicians**
- Pharmacist experience in developing and using **collaborative practice agreements** for Direct Patient Care Models



### Organizational Success Factors

*Influenced the focus, commitment and pace of integration of clinical pharmacist services*

- The **availability of data** and reports to identify high-risk, high-value patients for pharmacist interventions
- **Medical leadership buy-in** to integrate and/or enhance clinical pharmacist services
- **Culture of team-based care** for better access and continuity of care, improve patient outcomes and quality measures, and reduce PCP clinical workload burden (only applies to Direct Patient Care Model)

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## Key Recommendations

### For State and Federal Level Policymakers

With the implementation of CT Executive Orders 5 and 6 (signed January 23, 2020) that address healthcare costs, primary care spending, and quality of care:

- **Develop quality benchmarks across all public and private payers** that include **medication-related clinical quality measures, over/under utilization measures, and patient safety measures.**
- Include the **costs of clinical pharmacists** working in primary care organizations **as part of the calculation of increased primary care spending** as a percentage of total healthcare spending to reach 10 percent by 2025.

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## Key Recommendations (continued)

### For State and Federal Level Policymakers

- Build on the CT Medicaid Transformation pharmacy project (2009) and the CT SIM CCIP Pharmacist Technical Assistance project (2019) to establish the integration of clinical pharmacists with primary care and population health teams as **strategic interventions for Medicaid members that improve outcomes and reduce health disparities.**
- State and federal policy makers need to **grant provider status for pharmacists in Medicare Part B and Medicaid programs.** Without such status, physicians are challenged by the lack of an explicit mechanism to pay for pharmacists' medication optimization and management services under alternative payment models.

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## Thank You



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